CALIFORNIA AGRICULTURAL EXPERIMENT STATION
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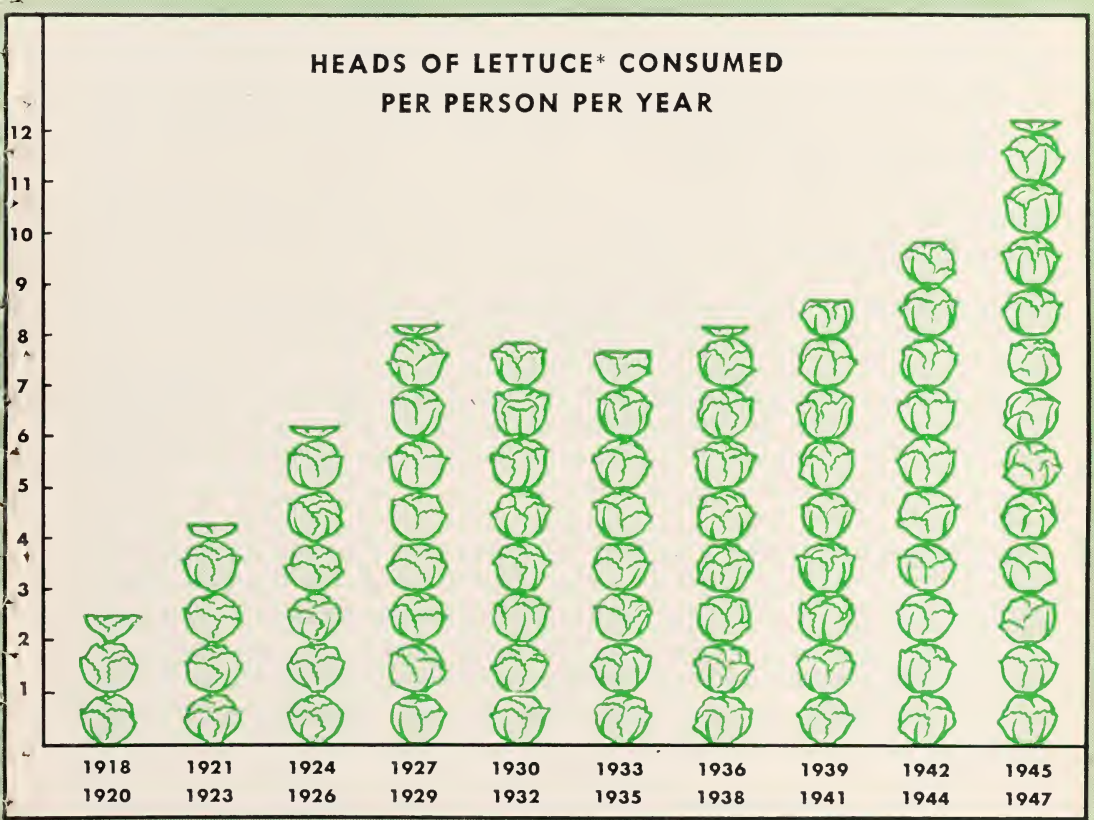
COMMERCIAL HEAD LETTUCE ECONOMIC STATUS 1947

SIDNEY HOOS and H. FISK PHELPS



*Yearly average from commercial production

THE COLLEGE OF AGRICULTURE
UNIVERSITY OF CALIFORNIA • BERKELEY

California's Place in the Industry

Acreage . . . planted to commercial head lettuce in the United States reached an all-time high in 1946. California's industry continues to dominate, with about 60 per cent of the country's total acreage.

Seasonal Types of lettuce have shifted little over the years, showing only a small increase of early-spring lettuce at the expense of the winter type. California is the leading producer of all seasonal types except late-spring lettuce.

Yield . . . . . per acre varies widely from year to year. California now has better yields of winter and summer lettuce than do competing producing states; harvested yields of early-spring and fall types are about average.

Production . . . of commercial head lettuce has steadily increased over the years in spite of fluctuations in acreage and yield. California's expansion leads the country. Average production in California in the years 1920–1924 was about 5 million crates; in 1947 it was 22.7 million crates.

Shipments . . . from California each year since 1935 have been about 70 per cent of the country's commercial movement.

Consumption . . of commercial head lettuce is strongly affected by the level of consumers' income, particularly in the lower and middle income brackets.

Farm Prices . . of California lettuce over the years have reflected a strongly stable level. During the war, farm prices of lettuce did not increase as much as prices of most truck crops or fresh fruits; but since the war they have tended to stay up better than prices of some other vegetables and fruits.

The Outlook . . for the commercial lettuce industry cannot be forecast with certainty because of the very nature of the crop. Figures show that the trend of California production is upward even in periods of declining acreage, thus indicating a gradually increased yield per acre. Should the yield be maintained at its present level, therefore, additional acreage would undoubtedly result in record production. In the event of such record production, farm prices in the state can be maintained only if consumer demand continues to increase.

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ACREAGE TRENDS

California leads in nation's lettuce acreage with 60 per cent of total . . . Arizona's increase in recent years places that state second

THE TREND OF commercial lettuce acreage in the United States is dominated by California's acreage. This state—by far the outstanding lettuce producer—has more lettuce acreage than any other state.

As early as 1920–1924, California accounted for over half (52 per cent) of the country's total commercial lettuce acreage. This proportion was maintained and then later increased, so that by 1947 California had 61 per cent of the country's total acreage. The greatest expansion in lettuce acreage, in other states as well as California, occurred between the years 1920 and 1934. From 1934 to 1943, when World War II was approaching its peak of activity, lettuce acreage in California varied about a slightly declining trend. The same was true for most other states, but Arizona's acreage followed a slightly rising trend. Figure 1 compares California's acreage with that of Arizona, the next state in importance, and with the United States as a whole.

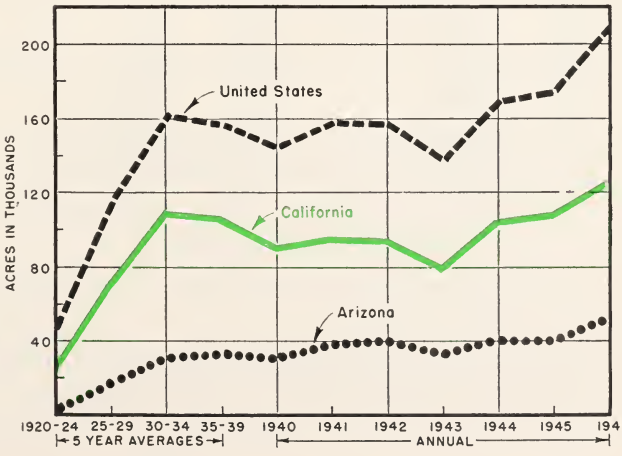
Beginning with the heavy expansion of 1944 over 1943 acreage, commercial lettuce acreage continued to increase during the war years and reached an all-time high point in 1946. The marked growth of lettuce acreage in this country is indicated by the following comparison of 1946 acreage with that of the average acreage during 1920–1924: the United States as a whole increased 348 per cent, and California's acreage increased 417 per cent. Arizona's acreage has shown an even greater increase (2,250 per cent); that state, which was hardly in the picture as a lettuce producer some twenty-five years ago, now is second only to California in amount of commercial lettuce acreage.

Seasonal Types

The extent to which commercial lettuce acreage in this country is distributed, according to predominant seasonal types, is indicated in figure 2. The distribution of this country's commercial lettuce acreage, between the major seasonal types, has been remarkably stable over the years. Only two significant shifts have occurred. During the years between 1920 and 1935, winter lettuce acreage decreased in rela-

Figure 1

COMMERCIAL LETTUCE ACREAGE IN THE UNITED STATES, CALIFORNIA AND ARIZONA



SHIFTS IN ACREAGE OF VARIOUS SEASONAL TYPES

Seasonal type	California		Arizona		Other states	
	1920–1924	1946	1920–1924	1946	1920–1924	1946
	Per cent					
Winter	52	24	49	47	21	5
Early spring	26	26	51	53	11	13
Late spring	..	..	..	..	9	22
Summer	..	21	..	..	47	28
Fall	22	29	..	..	12	32

tive importance, whereas early-spring lettuce acreage increased correspondingly. During 1941 and 1942 there was another relative increase of the early-spring acreage, but in 1943 the proportion dropped back to its prewar level. Except for the shift from winter to early-spring lettuce acreage, which had already developed before World War II, the acreage distribution by seasonal types, for the country at large, has changed very little.

Further comparisons of the relative magnitudes of lettuce acreage, by seasonal types and by major areas, are shown in figure 3, where 1946 acreage is contrasted with the average of 1920–1924. California is now in a dominant position, except in late-spring lettuce acreage, in which Arizona also is negligible. In fact, Arizona's position is limited to the winter and early-spring seasonal types, but in those two types Arizona's acreage is not

THE SEASONAL TYPES OF LETTUCE

The annual lettuce season is conveniently broken down into the following marketing periods: winter, early spring, late spring, summer and fall. Although there actually is no clear-cut separation of these seasonal types of lettuce, for purposes of convenience as well as reflecting to a great extent production and marketing practices, the following classification has been established:

WINTER—acreage planted after September 1, for harvest during December 15–March 15

SPRING—in general, acreage planted prior to March 1 for harvest until July 1

EARLY-SPRING—planted during January for harvest to May 1

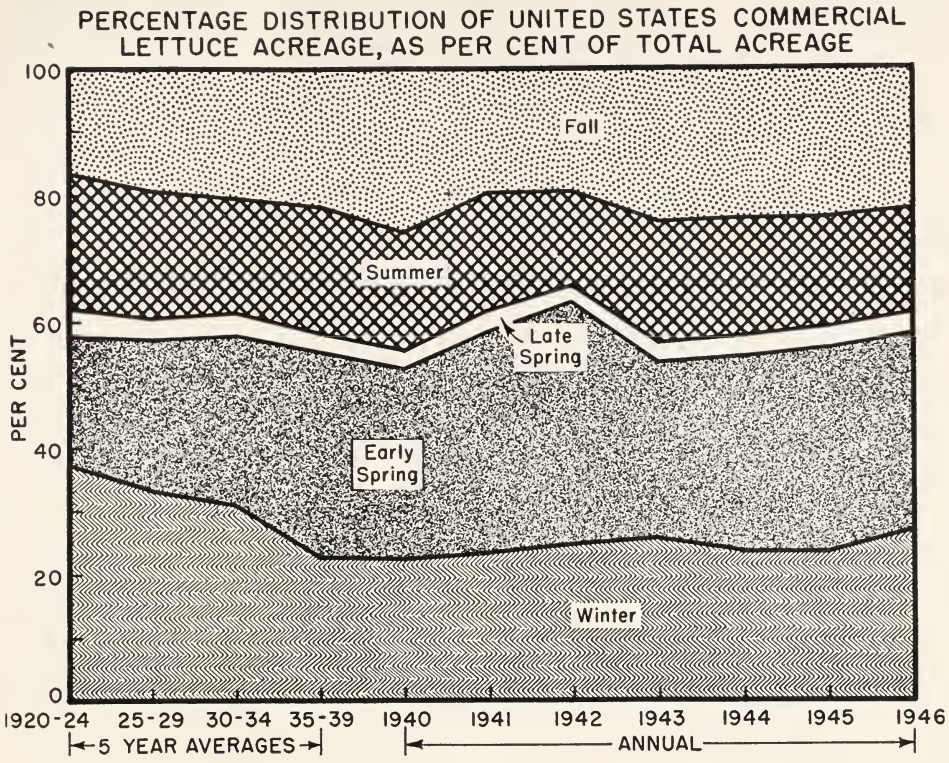
LATE-SPRING—planted during February for harvest to July 1

SUMMER—acreage planted during the period March 1–June 1, for harvest during July 1–September 1

FALL—acreage planted between June 1 and September 1, for harvest after September 1

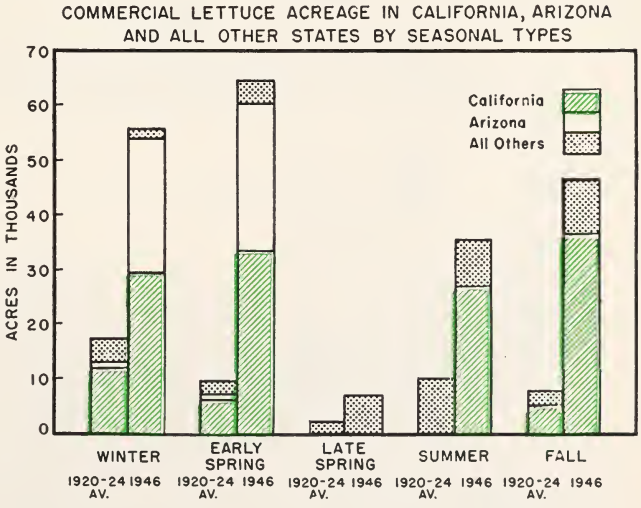
Except for the central coastal area, production in California producing areas is largely limited to one of the seasonal periods.

Figure 2



The figure above shows the remarkable stability of this country's acreage in the distribution among major seasonal types.

Figure 3



At right is shown California's dominant position in acreage of all but late-spring type.

much less than that of California. Whereas California had no summer lettuce acreage of importance in 1920–1924, the state's acreage of that type now is greater than all other states combined.

The summary table on page 4 presents information similar to figure 3, but in percentage terms for comparison of California acreage, with that of Arizona and other states.

CALIFORNIA ACREAGE

State leads in all seasonal types except late-spring . . . Largest plantings are fall variety . . . Winter type grown almost exclusively in Imperial Valley

Foregoing comments and charts help to indicate California's position in the commercial lettuce industry of the country, and the extent to which the state's position has changed during the past quarter-century. With such a background, we can now give more attention to California itself.

The trends in California lettuce acreage are shown, by seasonal types, in figure 4. Of the five seasonal types of lettuce noted in the above table, California produces all extensively except the late-spring type. From figure 4, it is evident that acreage in the state reached its prewar peak during 1930–1934. Thereafter, acreage tended to decline through 1943, but rose sharply in the following years and in 1946 reached an all-time high. Spring lettuce acreage has tended to vary, over time, more than the other seasonal types. Winter lettuce acreage was fairly constant from 1935–1939 through 1945, and although there was substantial expansion of acreage in 1946, the peak of 1930–1934 was not regained.

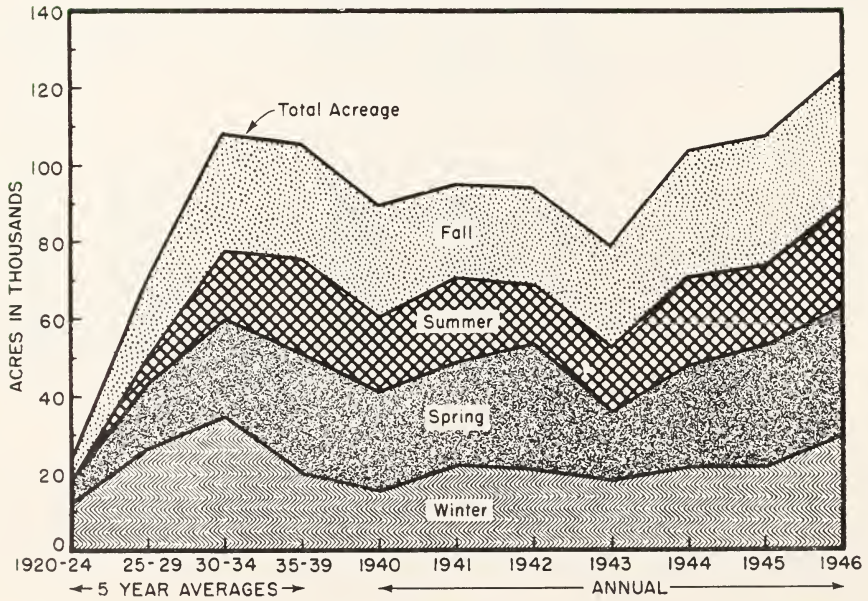
At present, fall lettuce acreage is the largest in the state, with spring lettuce acreage a close second. Winter and summer lettuce acreage follow, in importance, in that order. Since the present amount of acreage does not vary markedly between the major seasonal types, as it did in 1920–1924, there is now more stability throughout the year in cutting and shipping.

Seasonal Shifts

In contrast with the 1920–1924 period when winter lettuce acreage accounted for slightly over half of the state's total acreage, winter lettuce acreage now represents less than a quarter of the state's total. Spring lettuce acreage has varied between a fourth and a third of the total, and in 1946 was about the same proportion as

Figure 4

CALIFORNIA COMMERCIAL LETTUCE ACREAGE BY SEASONAL TYPES



in 1920–1924. Summer lettuce acreage, which was negligible in 1920–1924, grew sharply so that it now amounts to about 20 per cent of the state's total acreage. Except for 1942, when the proportion of summer lettuce dropped to 16 per cent, it has been about 20 per cent since 1940. In comparison with the other seasonal types, fall lettuce acreage has been most stable as a proportion of the total acreage amounting to about 30 per cent in recent years.

The marked expansion in California lettuce acreage since 1943 was accompanied by a fairly stable percentage distribution between the major seasonal types. During the past three years, spring and fall lettuce acreage of the state each have approached about 30 per cent, and winter and summer lettuce acreage each have averaged about 20 per cent of the state's total acreage.

District Acreage

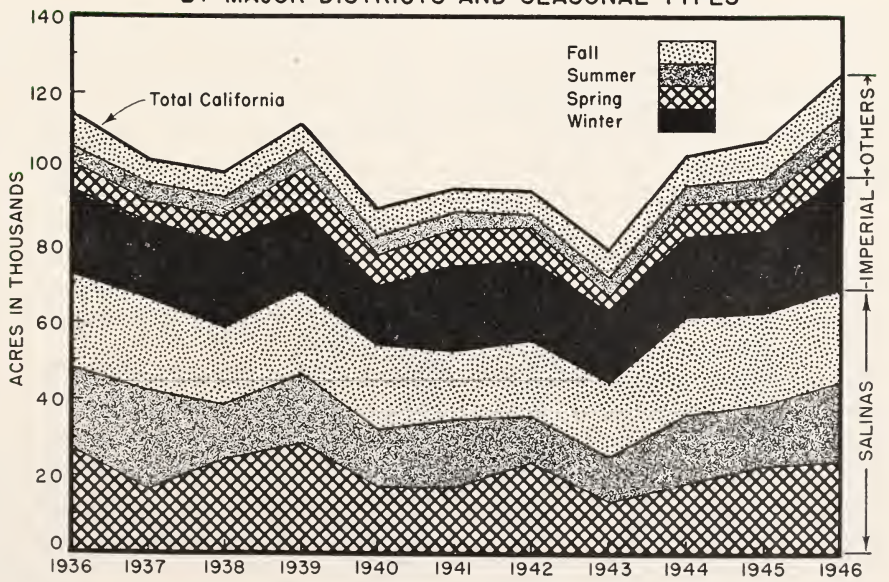
Commercial lettuce acreage in California is located in various parts of the state, but is concentrated in several major districts. The Salinas-Watsonville-Hollister district and the Imperial Valley are the dominant acreage-and-producing areas, although other areas—such as San Joaquin Valley and part of the Central Coast—have significant acreage. The statistical supplement to this report presents detailed data on the minor as well as the major lettuce areas of the state. But in this report, the Salinas and Imperial Valley districts are considered separately, with the remaining areas grouped together as "others."

The district acreage trends, shown separately for the major seasonal types, are summarized in figure 5. The figure makes clear the extent to which the lettuce acreage of California is concentrated in the Salinas-Watsonville-Hollister district. There, spring and fall acreage were of about the same magnitude in 1946, with each approximately 25 per cent greater than the summer acreage.

The Imperial Valley district acreage is primarily of the winter seasonal type, and is about of the same magnitude as the rest of the state, excluding the Salinas-

Figure 5

CALIFORNIA COMMERCIAL LETTUCE ACREAGE
BY MAJOR DISTRICTS AND SEASONAL TYPES



Watsonville-Hollister district. The remaining acreage in the state, grouped as "others" in figure 5, includes spring, summer, and fall seasonal types, with the spring and fall types each exceeding the summer seasonal type. Thus, only Imperial Valley has significant commercial lettuce acreage of the so-called "winter" seasonal type. The percentage distribution of the state's commercial lettuce acreage, and the changes which have occurred during the past decade, are shown below.

DISTRIBUTION OF COMMERCIAL LETTUCE ACREAGE

District and seasonal type	Year					
	1936	1938	1940	1942	1944	1946
	Per cent of State total					
Imperial Valley:						
Winter	19.2	22.0	17.0	22.1	20.3	23.7
Salinas–Watsonville and Hollister:	63.7	59.3	60.3	58.8	59.5	55.4
Spring	24.2	24.3	19.3	25.0	17.5	19.3
Summer	18.0	14.6	16.4	12.8	17.4	16.4
Fall	21.5	20.4	24.6	21.0	24.6	19.7
Others:	17.1	18.7	22.7	19.1	20.2	20.9
Spring	6.1	7.1	9.7	9.6	8.2	7.3
Summer	3.8	5.0	5.1	3.4	4.7	5.0
Fall	7.2	6.6	7.9	6.1	7.3	8.6

PRODUCTION AND YIELD

Production has steadily increased over the years in spite of fluctuations in acreage . . . Higher yield has served to keep production up

The increase of commercial lettuce production in the United States is pictured in figure 6, which shows the production trends separately for the United States as a whole, California, and Arizona.

After a sharp increase from 1920–1924 to 1925–1929, United States production continued to expand at a moderate rate until 1943. But with the sharp increase of 1944 production over 1943, and with another substantial increase in 1946, the country's annual production reached almost the equivalent of 34 million western crates (about 70 pounds each), or about three and one half times the average annual output during 1920–1924. Production in 1947 was 34.2 million crates, or slightly higher than in 1946.

Most of this country's increase in commercial lettuce production is accounted for by the expansion in California. During 1920–1924, the average annual production in California was about 5 million crates. During the next five years, the state's production more than doubled. The consistent and steadily expanded output through 1943 was followed by a marked growth, so that in 1947 California's production of about 22.7 million crates amounted to four and one half times the state's average output during 1920–1924.

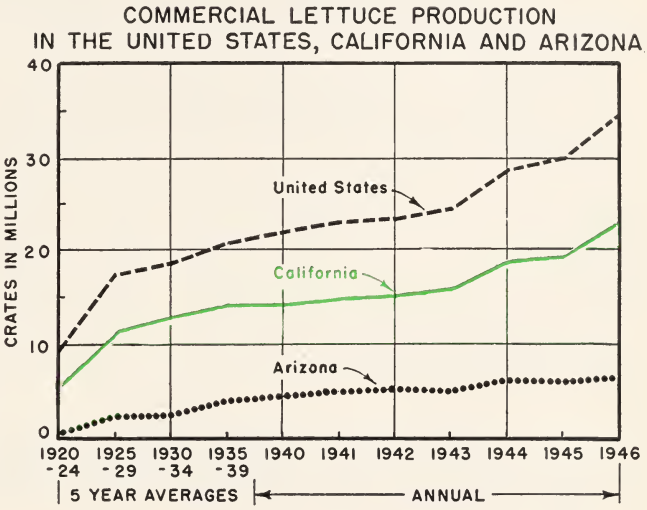
Although production in states other than California has increased over the years, its increase in terms of crates produced has been much less than California's increase. Furthermore, the large expansion in the country's commercial lettuce production since 1943 is due, primarily, to the expansion in California.

Arizona's production has steadily increased over the years, and that state now ranks next to California.

Distribution of Types

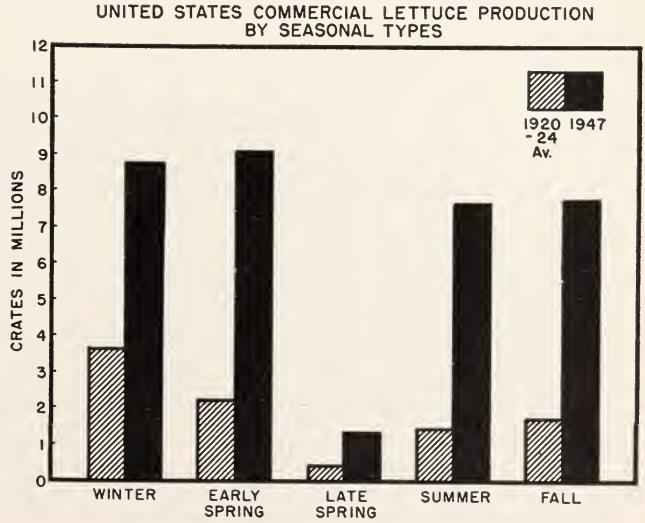
The distribution of United States commercial production of lettuce, by seasonal types, is shown in figure 7. Between 1920–1924 and 1930–1934, the percentage of total production accounted for by winter lettuce decreased sharply, but the production of both fall and summer lettuce increased correspondingly. During the past decade, there have been no significant shifts between the relative volume of the seasonal types produced in the country as a whole. The long-time shifts which have occurred have brought a decrease in winter type from 38.7 per cent of the total as an annual average in the years 1920–1924 to 25.4 per cent of the total in 1947. Spring lettuce has increased

Figure 6



By 1946 commercial lettuce production had reached 34 million crates, or three and one half times the 1920–24 average annual output.

Figure 7



The figure at right shows the significant increase in all seasonal types since 1920–24. Seasonal production is less concentrated now in winter lettuce.

from 27.9 to 30 per cent of the total; summer type has increased from 15.4 to 22.2 per cent, and fall type from 18.0 to 22.4 per cent.

Thus, the seasonal production is less concentrated now in winter lettuce and is more evenly distributed throughout the major seasons.

California Production

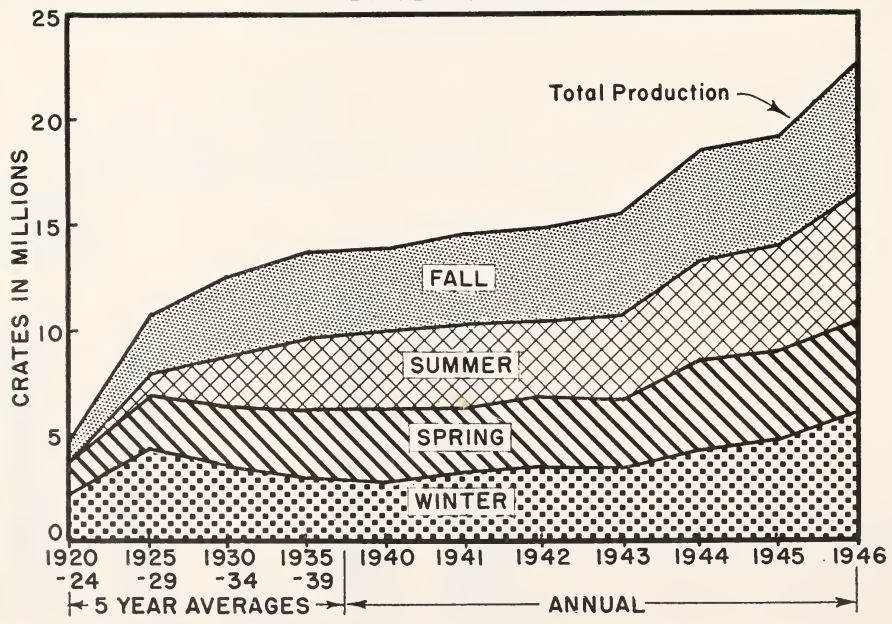
California's commercial production of lettuce, as summarized in figure 8, was characterized by a sharp growth in all seasonal types until 1925–1929. Thereafter and until 1943, the winter and spring seasonal types remained largely stable in production while the output of summer and fall grew consistently. During the past four years, however, production expanded sharply in winter lettuce grown in the Imperial Valley, and less sharply, but still substantially, in the other seasonal types grown in other parts of the state.

SHIFTS BETWEEN SEASONAL TYPES IN CALIFORNIA

Seasonal type	5-Year averages			Annual			
	1920–1924	1925–1929	1930–1934	1944	1945	1946	1947
	Thousands of crates						
Winter	2,228	4,379	3,556	4,200	4,664	6,048	5,265
Spring (Early)	1,536	2,620	2,943	4,240	4,236	4,303	5,032
Summer	....	952	2,274	4,809	5,088	6,008	6,160
Fall	1,237	2,824	3,805	5,280	5,177	5,808	6,237

Figure 8

CALIFORNIA COMMERCIAL LETTUCE PRODUCTION BY SEASONAL TYPES



Harvested Yields

In the commercial production of lettuce, harvested yield per acre has tended to change fairly widely from year to year. This has been so in other states as well as in California.

Figure 9 gives a comparative picture of commercial harvested lettuce yields in California, by seasonal types and in contrast with Arizona and the average of other states. For winter lettuce, the yield in California dropped sharply from 191 crates per acre during 1920–1924 to a low point of 102 crates per acre during 1930–1934. The winter lettuce yield then rose for the next several years and dropped again in 1941. But thereafter, the yield rose for four consecutive years and reached a peak for California in 1945. In both 1946 and 1947, the average yield was less than in 1945. In contrast, the yield of winter lettuce in Arizona has generally been less than in California, especially since 1942. During the World War II period, when the yield of California winter lettuce increased substantially, Arizona's yield of winter lettuce varied about a level trend.

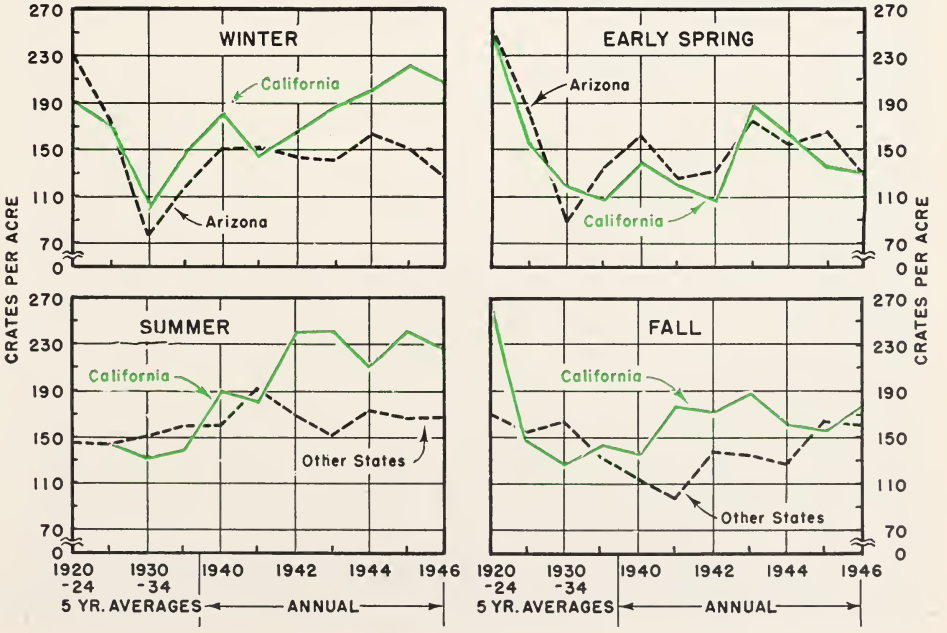
With respect to the harvested yield of early-spring lettuce, California and Arizona have had about the same experience. As may be seen in the upper right panel of figure 9, early-spring lettuce yields in both states have followed the same trend, with California's yield exceeding in some years but Arizona's yield being somewhat higher in most years. Both states had an increased yield in 1947, with California's average yield equalling the 1943 high.

In the production of summer lettuce, California's harvested yield and that of other states were similar up to 1941. Since 1942, California's yield has been much higher while that of the other states has remained at its earlier level. The state's 1947 yield was the highest on record for its summer lettuce.

The yield of fall lettuce in California fell sharply during the early 1920's, similar to what happened in the winter and early-spring seasonal types. But there-

Figure 9

YIELD PER ACRE OF COMMERCIAL LETTUCE BY SEASONAL TYPES FOR SELECTED STATES



after, California's yield of fall lettuce followed an upward trend until 1943 when it tended to level out. Although the yield of fall lettuce in other states decreased substantially from 1920 until 1941, it recovered in subsequent years and in 1945 was slightly higher than the California yield and only slightly lower in 1946 and 1947.

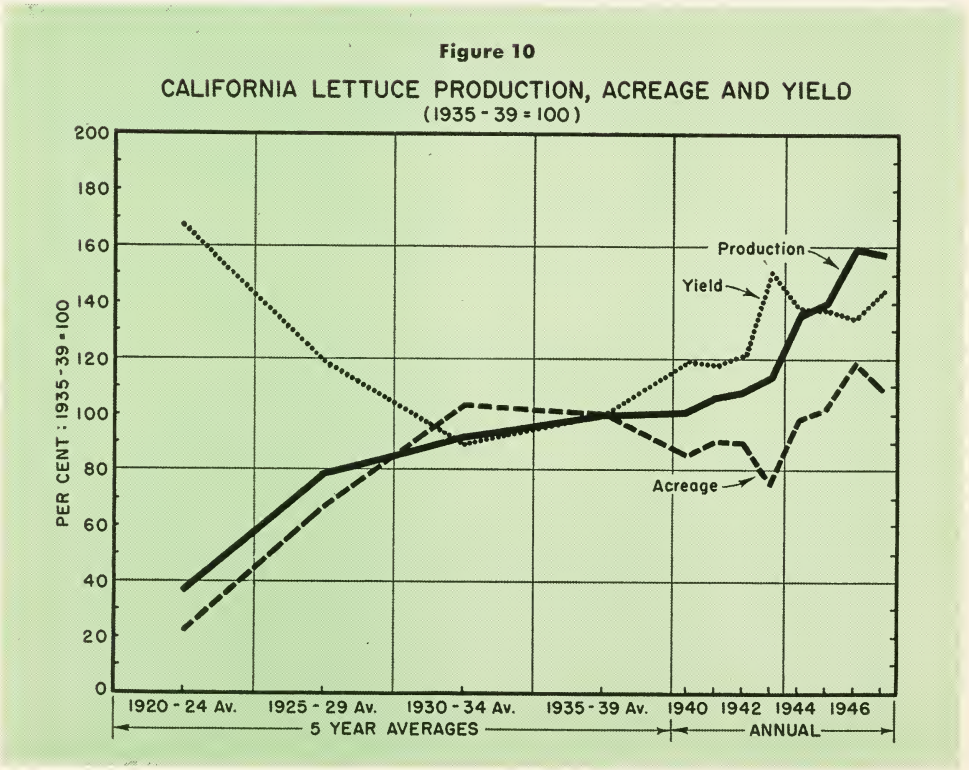
In the production and harvesting of all seasonal types of lettuce, California in 1947 had considerably better yields than the competing producing states.

Opposing Trends

Commercial lettuce acreage and production have followed broadly similar long-time trends since 1920. Important differences, however, are apparent during the period from the early 1930's until 1943. In that period, acreage in the United States as a whole tended to decrease slightly, and decreased more strongly in California. Arizona acreage grew a little, but in contrast with the reduced over-all acreage, production continued to increase not only for the country at large but also in California. The opposite trends in acreage and production from the early 1930's until 1943, may be accounted for by generally increased yields during that period. With some shifting from less to more intensive cultivation, associated with improved production techniques, the resulting increase in output per acre more than offset the fewer number of acres worked. After 1943, the heavily expanded production was due more to increased acreage than yield per acre. But in 1947, increased yields just about offset the decreased acreage, so production was only slightly greater than in 1946.

The differing trends in California lettuce acreage, production, and yield are brought together in figure 10 where the average of 1935–1939 is considered as 100 per cent for each of the series. The figure shows how California production has increased consistently over the years,

Figure 10



even in the face of declining acreage from 1930–1934 through 1943. Although yields during the past several years have been under the 1943 peak, they have been about 15 per cent above the 1940-1942 level, and almost 40 per cent above their 1935–1939 average. With the maintenance of yields at their recent levels, additional California acreage planted to lettuce will result in record production. Under such developments, farm prices in the state would be subject to a depressing influence. Whether an actual decline in price would develop then would depend upon the level of consumers' demand reflected by their disposable money income. Hence, in the face of expanding production, farm returns can be maintained only if consumer demand continues to increase.

TRENDS IN SHIPMENTS

California accounts for 70 per cent of country's commercial movement . . . Increase is largely in winter shipments

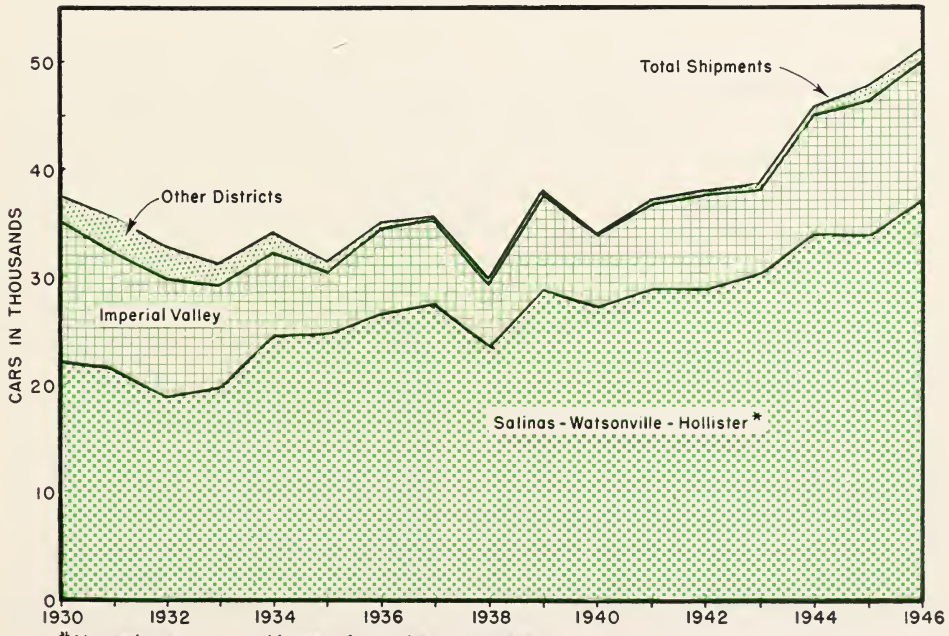
A significant measure of California's relative position in the commercial lettuce industry of the country is the proportion of total carlot shipments originating in the state. Each year since 1935, California has shipped almost 70 per cent of total carlot interstate shipments in the United States. During 1930–1934, the proportion increased from 67 to 77 per cent, but percentage declined to 67 per cent in 1935 and since then has exceeded 70 per cent only in 1936 (71 per cent) and 1939 (72 per cent). The average percentage since 1940 has been 68 per cent.

California Shipments

Figure 11 outlines the course of carlot shipments of lettuce from California since 1930. The data include boat shipments, converted to carlot equivalents. But the figures reflect only shipments out of the

Figure 11

CALIFORNIA CARLOT SHIPMENTS OF COMMERCIAL LETTUCE BY DISTRICTS



*About six per cent are shipments from other coast areas.

state; carlot or truck movements within the state are not included in the shipment data which, therefore, understate the total movement. However, the trend of total movement is similar to the trend for interstate shipments.

During the depression years of the early 1930's, lettuce shipments declined, but after 1934 shipments resumed their upward trend. The out-of-state movement grew moderately through 1943. Beginning with the large increase of 1944 over 1943, shipments during the past several years have greatly exceeded earlier years.

Influence of Winter Crop

With few exceptions, shipments originating in the Salinas-Hollister-Watsonville area followed the same course as total shipments from the state. The heavily expanded shipments since 1943 were influenced largely by increased movement of winter lettuce from the Imperial Valley.

The extent to which the shipments from Salinas-Hollister-Watsonville and the Imperial Valley areas dominate the state's total movement is further indicated in the following table.

Although the Salinas-Hollister-Watsonville area movement still dominates the state's shipments, since 1941 the Imperial Valley and the other producing areas have become relatively more important and are tending to regain the relative position they held in the late 1920's and early 1930's.

There have developed some shifts, during the past fifteen years, in the monthly or seasonal distribution of California's proportion of the country's total carlot shipments. California's proportion of total shipments of winter lettuce is now about 60 per cent compared with 75 per cent fifteen years ago. Early spring (50 per cent) and late spring (80 per cent) account for nearly the same proportions of total shipments. For summer lettuce the California proportion of 90–95 per cent has increased only slightly. Fall lettuce, however, has experienced a decline over the years of from 78 per cent to 50 per cent. For the individual months, the proportions have tended to fluctuate widely and to follow no clear cut pattern.

As well as shifts in the proportion of total shipments originating in California, there have been shifts in the monthly distribution of California carlot shipments. Such shifts are summarized in the table on page 15.

PERCENTAGE BREAKDOWN, BY AREAS, OF CALIFORNIA LETTUCE SHIPMENTS—INTERSTATE

Year	Central Coast area* including Salinas-Hollister-Watsonville	Imperial Valley	Rest of California
	Per cent		
1930	59.3	34.5	6.2
1935	78.3	18.4	3.3
1940	79.7	19.8	0.5
1941	77.5	21.6	0.9
1942	76.0	23.0	1.0
1943	78.4	20.1	1.5
1944	74.1	24.1	1.7
1945	70.8	26.3	2.8
1946	72.7	25.1	2.2

* The Salinas-Hollister-Watsonville area accounts for about 94 per cent of the Central Coast movement, with the remaining 6 per cent originating in other parts of the Central Coast area.

CALIFORNIA LETTUCE: MONTHLY CARLOT SHIPMENTS AS PER CENT OF YEARLY SHIPMENTS

Month	1930–1934	1935–1939	1940–1944	1945	1946
	Per cent				
January	10	8	10	13	9
February	12	9	9	9	8
March	8	3	2	2	7
April	8	8	8	9	9
May	12	14	14	13	12
June	5	7	6	8	7
July	7	10	11	9	11
August	7	10	10	10	10
September	8	9	10	9	10
October	9	9	9	8	8
November	9	10	8	4	6
December	5	3	3	6	3

INCREASE IN CONSUMPTION

Lettuce is limited in utilization by consumption only in fresh form . . . Consumer income reflected in lettuce consumption

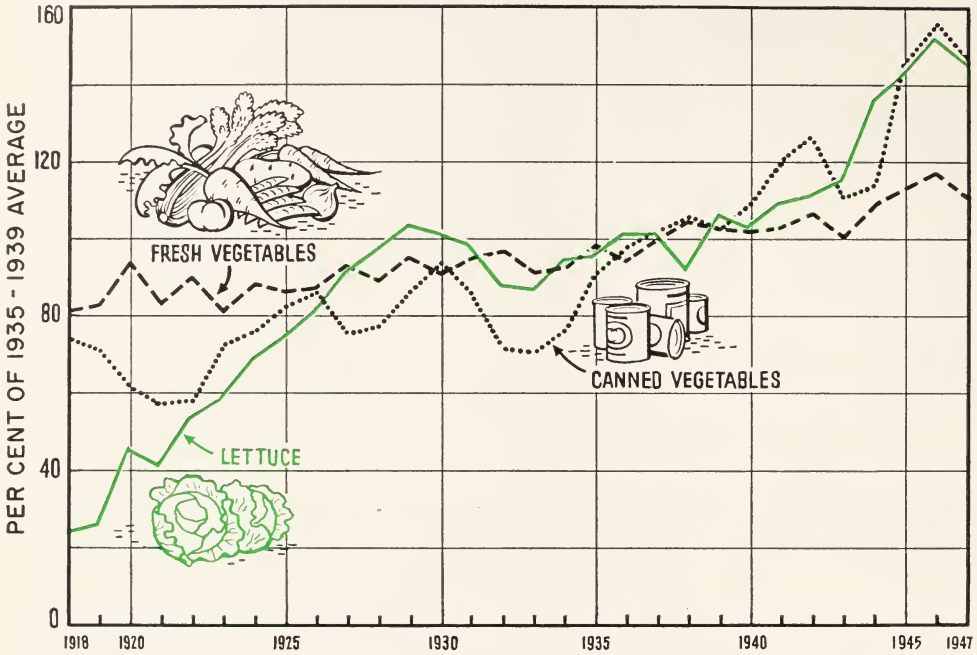
Lettuce is one of a limited number of crops which have only a single form of utilization. Lettuce is consumed only in fresh form, and growers and shippers are not concerned with other types of utilization, such as canning or drying. Although that simplifies the disposition problem, it also limits the alternatives which growers may select after the lettuce is produced. Either the grower and shipper dispose of the lettuce in fresh form for its ultimate use that way, or they receive no return from it.

The marked expansion of commercial lettuce production and shipments is reflected in a corresponding growth in the consumption of lettuce. This increase in the consumption of lettuce is part of the trend evident in this country during the past several decades. The use of fresh and canned vegetables and fruits, in general, has shown phenomenal growth in recent years.

Figure 12 shows the relative increase in the consumption of lettuce, compared with fresh vegetables as one group and canned vegetables as another group. The comparisons are shown in terms of index numbers, with the average of 1935–1939 as 100 per cent for each of the three series. From 1918 through 1929, lettuce consumption increased relatively more than fresh and canned vegetables. But after 1929 and until 1940, the trend of lettuce consumption followed fairly closely the consumption trends of fresh and canned vegetables in general, dipping during the depression of the 1930's and then rising as economic recovery spread over the country. But during the depression of the 1930's, lettuce consumption did not decline as much as did the consumption of canned vegetables. Beginning with 1940, the consumption of lettuce, as well as other fresh vegetables, grew sharply during the World War II period. But the consumption of canned vegetables grew only slightly, due primarily to the tin shortage and the huge demand by the armed forces for the available supply of canned foods. In the postwar years 1946 and 1947, lettuce consumption remained very high, exceeding the prewar years.

Figure 12

INCREASE IN CONSUMPTION OF LETTUCE, COMPARED WITH FRESH VEGETABLES AND CANNED VEGETABLES



LETTUCE CONSUMPTION PER HOUSEHOLD PER WEEK IN THE UNITED STATES, SPRING, 1942

Annual net income per household	All non-farm households	Urban households	Rural non-farm households
Dollars	Pounds	Pounds	Pounds
0–499	0.46	0.35	0.53
500–999	0.60	0.56	0.68
1,000–1,499	0.80	0.75	0.89
1,500–1,999	0.96	0.95	0.99
2,000–2,999	1.06	....	1.06
2,000–2,499	....	1.01	....
2,500–2,999	....	1.12	....
3,000 and over	1.31	....	0.97
3,000–4,999	....	1.22	....
5,000–9,999	....	1.66	....
Average of all income groups	0.93	0.98	0.80

Consumption Reflects Income

The fact that lettuce consumption is directly correlated with income is evident from the preceding comments; the trend of per-capita lettuce consumption generally follows the trend of national income. Further evidence on the relation between lettuce consumption and personal income is available from the several studies made on the relations between consumer incomes and expenditures. All

such studies, in which lettuce was considered as a separate commodity, indicate that generally as consumers' income increases their lettuce consumption also increases. Some of the results, pertaining to lettuce, of one of the more recent of such studies are summarized in the tabulation on page 16.

In the household income groups under $2,000 per year, the consumption of lettuce by rural non-farm households is greater than the consumption by urban households. But in the income groups exceeding $3,000 per year, the lettuce consumption in urban households is greater than the rural non-farm households. In general, considering the average of all income groups, lettuce consumption in urban households appears to be larger than in rural non-farm households.

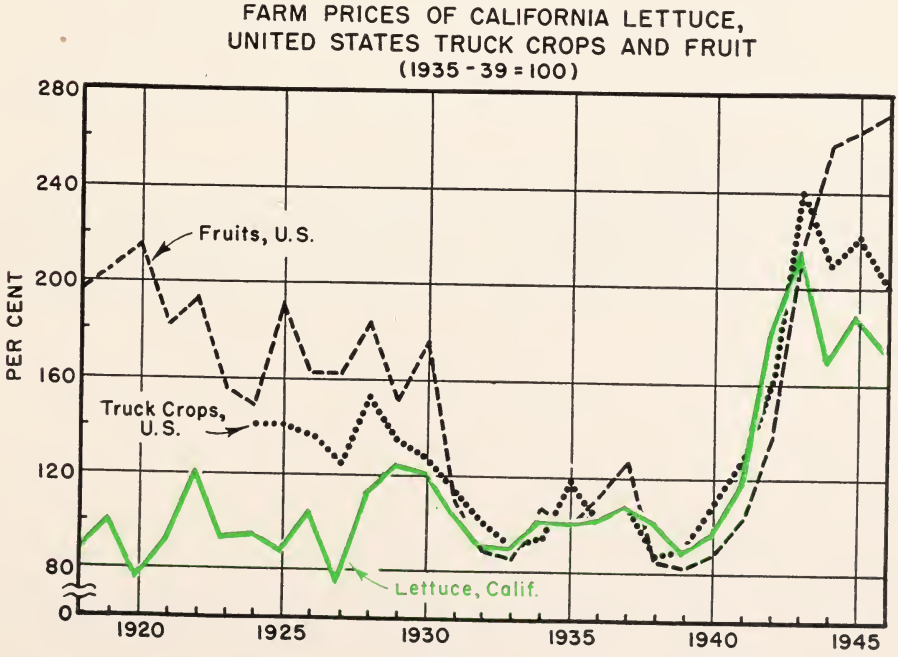
FARM PRICES

Lettuce prices have been strongly stable over the years . . . Have neither increased nor decreased as much as other vegetables and fruits

The trend of prices received by California farmers for lettuce is shown in figure 13 which also includes the prices received by United States farmers for fruits and truck crops. The prices are shown as index numbers with the average of 1935–1939 as 100 per cent.

In contrast with the farm prices of fruits and truck crops, the California lettuce farm price series varied about a level trend from 1918 through 1941. There was a recession from the 1929 level to the 1933 low; but the swing was much less than for fruits or truck crops in general. The 1920 and 1927 farm prices for lettuce were at a lower level than for any year during the depression of the early 1930's. Beginning with the 1942 season, lettuce prices rose sharply along with those of other products. But lettuce prices did not rise relatively as high as did the prices of fruits or truck crops as a group. The wartime peak of lettuce farm prices, as well as of other truck crops, was

Figure 13



reached in 1943, but farm prices for fruits continued to rise through 1946.

California farm prices of lettuce, by seasonal types, have followed the same general course, but there have been marked differences in the prices received by farmers for the several seasonal types. No single seasonal type of lettuce has consistently reflected prices above those of the other seasonal types. The wartime peaks occurred in 1942 for summer and fall lettuce, and in 1943 for winter and early-spring lettuce. For all seasonal types, the 1947 farm price was substantially above that of 1946, with early spring lettuce showing the greatest increase and fall lettuce the smallest increase. Since 1941, year-to-year fluctuations have been most pronounced in early spring lettuce and least in fall lettuce.

In general, lettuce farm prices during the past three decades did not rise as high nor fall as low as did the prices of truck crops or fruits generally. The farm price trend for lettuce has been remarkably stable over the years, excepting the war period, and even then lettuce prices continued to be more stable than the prices of truck crops, and especially more stable than most fruits.

Price Outlook

Growers and shippers, as well as consumers, are interested in the probable future course of lettuce prices. During more so-called "normal" periods, estimates of the future level of prices may be ventured with some degree of confidence. But at present, such forecasts are well-nigh impossible to make confidently. In determining the level of lettuce prices, influences such as the current inflationary trend are now dominant. However, if the prices of truck crops in general do not advance sharply because of unpredictable factors and if there is no sharp break in consumers' income in the very near future (which appears very unlikely), current indications are that 1948 lettuce prices will be not far from those which prevailed in 1947. As to the longer-run view, an important influence will be the level of consumers' disposable money income.

Supplement Available

The tables and figures appearing in this circular are summaries of more detailed tables, which are published in a separate Statistical Supplement in mimeographed form and which give the sources in detail. This statistical supplement may be obtained by writing to the Giannini Foundation of Agricultural Economics.

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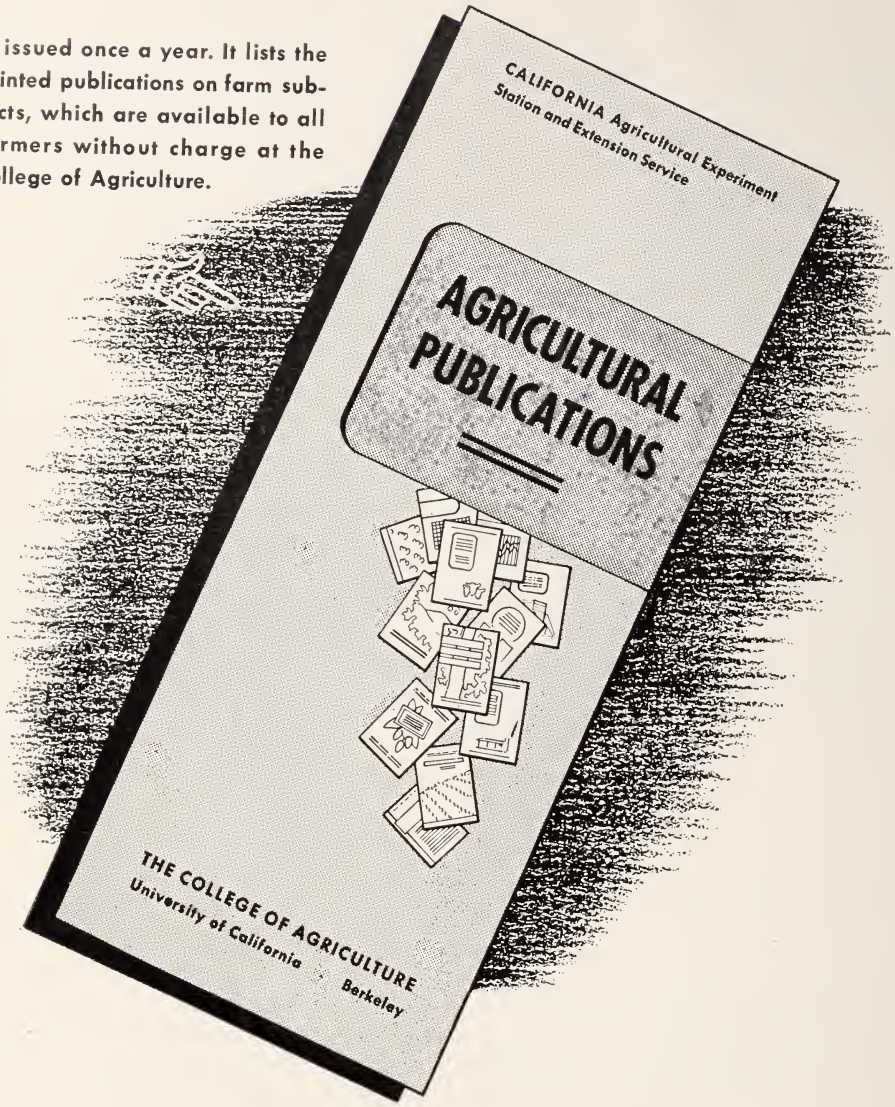

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